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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,235	08/08/2001	Hitoshi Kitayoshi	KITANO.009AUS	2765

7590 03/15/2005  
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EXAMINER
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ISSING, GREGORY C

ART UNIT	PAPER NUMBER
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3662

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/924,235

Applicant(s)

KITAYOSHI, HITOSHI

Examiner

Gregory C. Issing

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/23/02</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 3662

1. A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because it appears as though the disclosure is translated from a foreign language. The specification and claims are thus not fully comprehensible and it is difficult to determine the scope of the invention. There are numerous errors in grammar and punctuation that prevent a clear and definite meaning and scope of the disclosure. Applicant should thoroughly review the entire specification and claims and amend accordingly to correct for such.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 1-19 fail to clearly and distinctly set forth the subject matter because the claimed method defines comparing an observation result of a radiowave observed at a position with simulation results of radiowaves emitted from the position. If the simulation results are associated with emissions from the position, the clarity of the language "arrival directions" is not clear.

Art Unit: 3662

5. It is not clear what is being claimed since it is not understood how the observations of radiowaves, received (observed) at a first position, when compared with observations of radiowaves received at a plurality of second positions, from transmissions from the first position, can provide any information as to the location of "a radiowave emitting source" since there is no use of any transmission or reception of radiowaves from the radiowave emitting source. What is the relationship between the "one position in an observation area" and the "location of a radiowave emitting source". The specification appears to teach use of the monitoring stations 12a-12c observing radiowaves emitted from a source 10 and subsequently comparing the results to simulation results in a database; thus, where does the specification adequately teach observing the arrival directions and pattern of intensities at the "one position" which appears to be the position to be located?

6. Additional examples, though not complete, include the language in claims 3 and 5, where it is unclear how electric field intensities to be observed in the respective spaces are computed.

7. In claims 13 and 15, it is unclear how the storing means computes electric field intensities.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Perez-Breva et al (6,782,265).

Art Unit: 3662

10. Perez-Breva et al disclose a location method and apparatus based on using RF spectral fingerprinting wherein a predetermined combination of observable RF spectral parameters are measured, see col. 4, par. 1. The measured RF fingerprint is compared to a database of fingerprints to find the one that most closely matches, which closest matched fingerprint is associated with a position, see col. 5, par. 2. The database is generated using RF prediction models, taking into consideration types of buildings, terrain, time of day, environmental and seasonal conditions, and may be enhanced using field measurements. Directional information is inherently associated with the RF fingerprint.

11. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Wax et al (6,249,680).

12. Wax et al disclose the method and apparatus as best understood including a method and apparatus for determining the location of a radiowave emitter including measuring a signal signature of a radiowave emitter at a plurality of receiver antenna positions wherein the signature may be derived from any combination of amplitude, phase, delay, direction and polarization information, and comparing the measured signature to a database comprising calibrated signal signatures associated with their corresponding locations to find a best match between the measured and database signatures.

13. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiura et al (6,140,964).

14. Sugiura et al teach a neural network wherein observations of radiowave signal characteristics are measured and utilized such that a comparison of observed characteristics with simulated results created by the neural network is made to determine the location of a mobile device. Sugiura et al teach numerous variations in embodiments including comparing measurements received at the mobile device with simulated values previously created and collected at a central station, comparing measurements received at a plurality of base stations with simulated values

Art Unit: 3662

previously created and collected at a central station, mobile centric positioning or network centric positioning. Each of the embodiments utilizes measurements of radiowave propagation parameters, which inherently include signal amplitude and directional information. The formation of the neural network using a mobile station of known position and movement inherently incorporates changes in directions of emissions. Thus, as best understood, Sugiura et al are deemed to disclose the radiowave monitoring method including comparing an observation result of a radiowave observed at one position, i.e. the mobile position, with simulated results, i.e. the neural network, based on observations of radiowaves at a plurality of base stations.


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rossoni et al (6,487,417) disclose a method and system for characterizing propagation characteristics of a radiowave signal in three-dimensions including forming a database of propagation paths of RF signals from a position and a plurality of receivers, wherein the propagation paths are represented by a plurality of line segments projecting radially along azimuth and elevation paths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is currently 703-306-4156. As of April 4, 2005, the new number is 571-2726973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 703-306-4171 (new number 571-272-6979). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory C. Issing  
Primary Examiner  
Art Unit 3662

gci